

Snow on Ground at End of Month.—Isolated stations report the following depths in inches: Auburn, N. H., 5; Mt. Washington, 20; Burlington, Vt., 0 to 1; Oswego, N. Y., trace; Fallington, Pa., 0.25; Edgerton, Wis., 2.81; near Ft. Madison, Ia., 4.50; Morriston, Dak., 18; Deadwood, Dak., trace; Pike's Peak, 16.75.

Hail-storms were of considerable frequency west of the Mississippi and north of the Ohio. Beyond these boundaries, to the eastward, only three stations reported, viz: Ocean City, N. J., 2nd; Wytheville, Va., 7th; Point Judith, R. I., 14th. To the westward in the various States on the following dates: Texas, 5th, 7th, 20th, 21st, 24th, 25th and 29th. Louisiana, 12th, 21st, 29th. Arkansas, 11th and 12th; Fayetteville, 11th, very violent, storm preceded by dark heavy clouds rushing together from northwest and southwest, hailstones falling as they met; many stones from two to two-and-a-half inches in diameter; iron and tin roofs badly damaged. Indian Territory, 17th. Missouri, 29th and 30th; Ironton, 29th, town and surrounding country visited by the heaviest hail-storm ever known in this section: storm lasted about five minutes; most of the stones were as large as hen's eggs, some of them measuring more than seven inches in circumference; nearly all glass in the northern side of buildings was broken and foliage and vegetation badly damaged. Illinois, 9th, 11th, 28th and 29th. Indiana, 11th, 25th and 28th; the storm of the 28th seemed to be quite extensive, as it was reported from southern Illinois, northwestward along the Ohio River to points beyond Cincinnati. Ohio, 15th and 28th. Michigan, 16th, 28th and 30th. Minnesota, 5th, 29th and 30th. Dakota, 5th, 14th, 26th, 29th and 30th. Nebraska, 6th and 29th. Kansas, 1st, 2nd, 10th, 17th, 20th, 29th and 30th. New Mexico, 5th, 6th, 7th, 12th and 16th. Colorado, 5th, 6th, 8th, 12th, 29th and 30th. Wyoming, 9th, 10th, 14th, 17th and 23rd. Montana, 19th and 27th. Utah, Salt Lake City, 23rd. Nevada, Pioche, 18th. Arizona, 15th and 16th. California, Yosemite valley, 30th, very severe, bits of jagged ice as large as filberts fell for five minutes, covering the ground. Idaho, Ft. Lapwai, 23rd. Washington Territory, Bainbridge Island and Neah Bay, 24th.

RELATIVE HUMIDITY.

The percentage of mean relative humidity for the month ranges as follows: New England, 54 to 80; Middle Atlantic States, 54 to 78; South Atlantic States, 55 to 85; Eastern Gulf States, 59 to 77; Western Gulf States, 54 to 75; Ohio Valley and Tennessee, 60 to 68; Lower Lake region, 62 to 74; Upper Lake region, 58 to 73; Upper Mississippi valley, 61 to 72; Missouri valley, 62 to 73; Red River of the North valley, 72 to 76; Texas, 50 to 75; Middle Plateau, 33 to 42; Southern Plateau, 30 to 76; California, 43 to 77; Oregon, 56 to 69; Washington Territory, Olympia, 78. *High stations* report the following percentages not corrected for altitude: Pike's Peak, 70.8; Santa Fe, 32.7; Cheyenne, 51.2; Denver, 45.2; Mt. Washington, 79.6.

WINDS.

The prevailing winds during the month of April, 1881, at Signal Service stations are shown on chart No. II by arrows, which fly with the wind. Throughout the country east of the Mississippi the winds were from *west* to *northwest* except *southwest* along the South Atlantic coast. In the Western Gulf States and Texas, *southeast* to *southwest* and *south*. Along the eastern slope of the Rocky Mountains, *northeast* to *northwest* and *north*. Over the Middle and Northern Plateau regions, *west* and *southwest*. Southern Plateau, *variable*. Along the Pacific coast, *west* and *northwest*, except *southerly* in the Northern Pacific coast region.

Total Movements of the Air.—The following are the largest total movements at Signal Service stations: Mt. Washington, 25,080; Pike's Peak, 13,503; Portsmouth, 12,886; Hatteras, 12,670; Cape May, 11,717; Chincoteague, 11,515; Kittyhawk, 11,447; Delaware Breakwater, 11,006; New Shoreham, 10,863; Wood's Holl, 10,743; Indianola, 10,382; Cape Henry, 10,373; Dodge City, 9,667; Macon, 9,335; Fort Griffin, 9,320; Sandusky, 9,150; Sandy Hook, 9,123; Barnegat, 9,108; Ft. Elliott, 9,010; Champaign, 8,991; Decatur, 8,610; Philadelphia, 8,514; Ft. Sill, 8,421; Galveston, 8,214; Cedar Keys, 8,032. The *smallest* are Florence, 1,842; Phoenix, 2,064; Roseburg and Lewiston, 2,271; La Mesilla, 2,405; Visalia, 2,424; Tucson, 2,683; Deadwood, 2,746; Silver City, 2,975.

High Winds.—Winds of 50 miles per hour and over, were reported as follows: On the summit of Mt. Washington, 2nd to 7th, 11th, 12th, 14th to 19th, 21st to 23rd, 24th, 25th, 26th, 28th, 29th, 30th, on four of these dates the wind reached a velocity of 100 miles or over; the maximum velocity, 120 miles NW., occurred on 2nd, 3rd, 29th. On the summit of Pike's Peak, 2nd, 13th, 14th, 15th; maximum velocity 68, NW. 14th; Eastport, 52, NE. 15th; Thatcher's Island, 55, NE. 15th; New Shoreham, 60, NE. 15th; Cape Henry, 52, N. 14th; Kittyhawk, 76, NE. 14th; Hatteras, 60, N. 14th; Portsmouth, N. C., 88, NE. 14th; Ft. Macon, N. C., 52, N. 14th; Indianola, 51, NE. 4th; North Platte, 54, S. 30th; Fort Stevenson, Dak., 50, W. 26th; St. Vincent, Minn., 56, SW. 26th.

Local Storms.—De Soto Co., Miss., 12th, about 2 p. m., violent tornado appeared to originate near Commerce, a small town on the Mississippi, where it wrecked ten cabins, three gin houses,